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Mr. Mike Thomas Vice President Red River Coal Company, Inc. 6999 Polk Road Norton, Virginia 24273

June 1, 2017

By Certified Mail – Return Receipt Requested

Re: 60-Day Notice of Intent to File Citizen Suit Under Clean Water Act Section 505(a)(1) for Violation of Federal and State Regulations and Conditions of Virginia VPDES Permit VA0081401, and 60-Day Notice of Intent to File Citizen Suit Under the Federal Surface Mining Control and Reclamation Act Section 520(a)(1) for Violations of Federal and State Regulations and Permit Conditions of Virginia CSMO Surface Mining Permit 1101401

Dear Mr. Thomas:

The Sierra Club, Appalachian Voices, and Southern Appalachian Mountain Stewards (collectively, "Environmental Groups"), in accordance with section 505 of the Clean Water Act (the "Act" or the "CWA"), 33 U.S.C. § 1365, and 40 C.F.R. Part 135, hereby notify you that Red River Coal Company, Inc. ("Red River") has violated, and continues to violate, Section 301 of the CWA, 33 U.S.C. § 1311, as a result of the unpermitted discharge of pollutants from its North Fox Gap Surface Mine into the South Fork Pound River, Rat Creek, and unnamed tributaries to those water bodies, from underdrains UD-1 through UD-6, and UD-8. The Virginia Pollutant Discharge Elimination System ("VPDES") permit associated with the North Fox Gap Surface Mine, VA0081401, does not authorize the discharge of any pollutants from those underdrains. If within sixty days of the postmark of this letter Red River does not bring itself into full compliance with the CWA, we intend to file a citizens' suit seeking civil penalties for Red River's ongoing and continuing violations and for an injunction compelling it to come into compliance with the Act.

We further notify you, in accordance with section 520 of the federal Surface Mining Control and Reclamation Act ("SMCRA"), 30 U.S.C. § 1270, and 30 C.F.R. § 700.13, that Red River is in ongoing and continuing violation of certain federal and state regulations promulgated under SMCRA and the Virginia Coal Surface Mining Control and Reclamation Act ("VCSMCRA") and certain permit conditions in its Virginia Coal Surface Mining Operation ("CSMO") Permit 1101401 as a result of its discharges of pollutants from its North Fox Gap Surface Mine into the South Fork Pound River, Rat Creek, and unnamed tributaries to those water bodies. If, within sixty days, Red River does not bring itself into full compliance with SMCRA, the regulations promulgated under SMCRA and VCSMCRA, and its CSMO permit, we intend to file a citizens' suit in federal court seeking an injunction compelling Red River to come into compliance with the applicable statutes, regulations, and permits.

I. FACTUAL BACKGROUND

On January 16, 1992, Virginia issued combined VPDES Permit VA0081401 and CSMO Permit 1101401 to Red River for its North Fox Gap Surface Mine in Wise County, Virginia. These permits remain in effect. As part of the permitted coal mining operations, Red River constructed hollow fills 1 through 8, each of which includes an engineered underdrain to channelize and direct the flow of water out through the toe of the fill. A map showing the configuration of the hollow fills and associated underdrains is below:

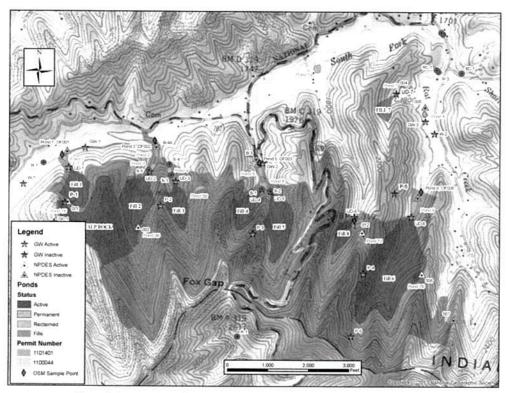


Figure 3.—Location of NPDES outfalls, ground water monitoring sites, and existing and reclaimed ponds

Fill 1 and associated underdrain 1 discharged into pond 1, which then itself discharged through outfall 001 into an unnamed tributary of the South Fork Pound River. Fill 2 and its associated underdrain 2, together with fill 3 and its associated underdrain 3, discharged into pond 2, which then discharged through outfall 002 into a separate unnamed tributary of the South Fork Pound River. Fill 4 and its associated underdrain 4, together with fill 5 and its associated underdrain 5, discharged into pond 5, which then discharged through outfall 003 into another unnamed tributary of the South Fork Pound River. Fill 6 and its associated underdrain 6 discharged into pond 9, which then discharged through outfall 006 into an unnamed tributary of Rat Creek which, in turn, flows into the South Fork Pound River. Fill 8 and its associated underdrain 8 historically discharged to a sediment pond on a separate permit downslope of the mine. That permit was released in March 2007, and underdrain 8 now discharges directly into an unnamed tributary of the South Fork Pound River.

During a site inspection on April 29, 2014, Virginia Department of Mines, Minerals, and Energy's Division of Mined Land Reclamation ("DMLR") authorized Red River to remove pond 3 (below underdrain 2) and pond 4 (below underdrain 3). During a site inspection on June 11, 2014, DMLR authorized Red River to remove ponds 1 (below underdrains 1), 2 (below underdrains 2 and 3), 5 (below underdrains 4 and 5), 6 (below underdrains 4 and 5), and 9

(below underdrain 6). Red River stopped reporting monitoring data from ponds 1, 2, 3, 4, 5, 6, and 9 or from the original locations of outfalls 001, 002, 003, or 006 once the ponds were removed. In a "Monitoring Point Detail Supplement" dated February 26, 2015, DMLR authorized the deletion of outfall 003 (ponds 5 and 6), and the relocation of the NPDES monitoring locations for outfalls 001 (pond 1), 002 (ponds 2, 3, and 4), and 006 (pond 9) from their prior locations below the fills to new locations upslope of the fills at mine bench ponds 1B, 3B, and 7B, respectively. Ponds 1B, 3B, and 7B are on-bench ponds that do not report any discharge.

Although ponds 1, 2, 3, 4, 5, 6 and 9 have been removed and revegetated, the hollow fills and associated underdrains 1, 2, 3, 4, 5, and 8 remain in place and continue to discharge into unnamed tributaries of the South Fork Pound River, and hollow fill/ underdrain 6 remains in place and continues to discharge into an unnamed tributary of Rat Creek and, ultimately, into the South Fork Pound River.

Despite the removal of the ponds and the cessation of monitoring at the former hollow fill pond outfalls, fills and underdrains 1, 2, 3, 4, 5, 6, and 8 continue to produce discharges high in total dissolved solids and with high conductivity. These discharges have resulted in elevated levels of total dissolved solids and conductivity in the receiving streams, including the South Fork Pound River and Rat Creek.

VPDES Permit VA0081401 contains the "Standard NPDES Permit Terms and Conditions," including:

F. Unauthorized Discharges.

Except in compliance with this permit, or another permit issued by the Department, it shall be unlawful for any person to:

- 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or
- 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

Virginia's federally-approved SMCRA mining program, which is administered by DMLR, includes performance standards that are incorporated by reference into Red River's CSMO permit 1101401 by operation of 4 VAC 25-130-773.17. Those performance standards include 4 VAC 25-130-816.42, "Hydrologic balance; water quality standards and effluent limitations," which provides that:

Discharges of water from areas disturbed by surface mining activities shall be made in compliance with all applicable State and Federal water quality laws, standards and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR 434.

Among the water quality standards with which all discharges of water from permitted surface mines must comply is 9 VAC 25-260-20, which provides that:

State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life.

In the Probable Hydrologic Consequences Determination prepared by Red River in 1991 as part of its SMCRA permit application, the company stated that "Discharges from the permit area flow to South Fork Pound River and Rat Creek. Baseline data show that existing stream water quality in these two streams is generally good." Additional baseline monitoring conducted in January 1992, prior to the commencement of mining operations at the North Fox Gap Surface Mine authorized under CSMO permit 1101401, showed a TDS level of 626 mg/l in the South Fork Pound River at monitoring point R-2, located downstream of all discharge points from the mine. Monitoring conducted on May 12, 2017, at approximately the same location in the South Fork Pound River, showed a TDS level of 1720 mg/l, almost three times the baseline level.

A comparison of the level of TDS at monitoring points below underdrains 1, 2, 3, 4, 5, 6, and 8 from January 1992, prior to the commencement of mining, and August 2016, two years after pond removal, show similar significant increases in TDS levels, as illustrated in Table 1.

Table 1 - Comparison of current TDS discharges to pre-mining baseline

Location	1992 - baseline	2016*	
Fill 1/ UD-1	1018	2460	
Fill 2/ UD-2	1339	2100	
Fill 3/ UD-3	1546	2100	
Fill 4/ UD-4	798	2820	
Fill 5/ UD-5	776	2820	
Fill 6/ UD-6	420	2250	
Fill 8/ UD-8	1564	3150	

^{*} Results from sampling conducted by the federal Office of Surface Mining, Reclamation and Enforcement on August 25, 2016.

The levels of conductivity measured at a monitoring point in the South Fork Pound River immediately downstream of all discharges from the Fox Gap Surface Mine are also significantly elevated, and continue to increase. Red River's contractor, Biologic Monitoring, Inc., regularly monitors conductivity levels at monitoring point SFP-2, which is located just downstream from monitoring point R-2. The results of the SFP-2 monitoring are provided in Table 2.

Table 2 – Conductivity levels measured at SFP-2

Date	Conductivity (µS/cm)
11/5/2012	1942
5/13/2013	1984
9/5/2013	2060
4/28/2014	2110
9/29/2014	2160
10/17/2016	2230

Monitoring conducted by Red River at each of the underdrains confirms that the underdrains and related hollow fills are a significant source of the high levels of total dissolved solids and conductivity detected in the receiving streams, including in South Fork Pound River below the mine. Table 3 provides the range of TDS and conductivity recorded at each of the underdrains between January 2012 and February 2017. The full data sets are provided in Appendix A to this letter.

Table 3 – Range of TDS, conductivity and flow levels reported at underdrains 1, 2, 3, 4, 5, 6, and 8 from January 2012 through February 2017

UD	TDS	Conductivity	Flow (gpm)
UD-1	1018-3356	701-3115	0-100
UD-2	1990-4148	1640-3952	5-300
UD-3	1568-3372	1662-3254	30-520
UD-4	952-2330	441-2832	0-920
UD-5	1986-3256	1544-3304	10-162
UD-6	1698-2488	820-2699	15-400
UD-8	1620-3422	1903-4492	2-100

Red River has itself acknowledged that its surface mining activities at the mine are the cause of the elevated levels of TDS and conductivity in the discharges from the underdrains and, ultimately, in the several unnamed tributary receiving streams and in Rat Creek and the South Fork Pound River. In the "Probable Hydrologic Consequences Determination" submitted by the company in 2016 as part of its application 1007840 related to CSMO permit 1101401, Red River noted that "[u]nderdrains UD-1, 2, 3, 4, and 6 continue to show elevated levels for parameters TDS, conductivity and sulfates," and that "[c]onductivity, total dissolved solids, and sulfate values have fluctuated, but on average appear to have increased somewhat from baseline results." In fact, levels of TDS and conductivity from the underdrains have remained significantly elevated, even after completion of active mining and the removal of the ponds.

Biological monitoring in the South Fork Pound River and Rat Creek makes clear that the high-TDS and high-conductivity discharges from Red River's North Fox Gap Surface Mine have caused or contributed to harm to aquatic life in those streams. On October 17, 2016, Red River's contractor, Biologic Monitoring, Inc., calculated the Virginia Stream Condition Index (VASCI) score at monitoring point SFP-2, which is located in the South Fork Pound River immediately downstream of all discharges from the North Fox Gap Surface Mine. Streams with VASCI scores below 60 are considered to be biologically impaired. Red River's contractor reported a VASCI score of 33.6, which is indicative of "severe stress." The October 17, 2016, score is consistent with the results of other biological monitoring conducted by Biologic Monitoring, Inc. since 2012 at monitoring point SFP-2, all of which similarly show biological impairment as illustrated in Table 4:

Table 4 - Biological monitoring at SFP-2

Date	VASCI
11/5/2012	43.2 (stress)
5/13/2013	35.5 (severe stress)
9/5/2013	31.8 (severe stress)
4/28/2014	39 (severe stress)
9/29/2014	35.2 (severe stress)
10/17/2016	33.6 (severe stress)

In 2011, EPA scientists summarized the existing science connecting conductivity and biological degradation in an EPA report entitled, "A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams." That report, which was peer-reviewed by top scientists on EPA's Science Advisory Board, used EPA's standard method for deriving water quality criteria to derive a conductivity benchmark of 300 μ S/cm. <u>Id</u>. at xiv-xv. According to the species sensitivity distribution in the benchmark, on average, five percent of species are lost when conductivity rises to 295 μ S/cm, over 50% are lost at 2000 μ S/cm, and close to 60% are lost at 3000 μ S/cm. <u>Id</u>. at 18. EPA considered potential

confounding factors, including habitat, temperature, deposited sediments and pH, and concluded that none of them altered the relationship between conductivity and biological decline or the benchmark value of $300 \,\mu\text{S/cm}$. $\underline{\text{Id}}$. at 41, B-22. EPA found that the loss of aquatic species from increased conductivity was "a severe and clear effect." $\underline{\text{Id}}$. at A-37. EPA also conducted a detailed causal assessment and concluded that there is a causal relationship between conductivity and stream impairment at the streams it studied in West Virginia. $\underline{\text{Id}}$. at A-39. Finally, EPA's benchmark report analyzed the relationship between conductivity levels and the biological impairment threshold employed by the West Virginia Stream Condition Index ("WVSCI"), a measure of biological integrity very similar to the VASCI. EPA found that a WVSCI score of 64 (close to the impairment threshold of 68) corresponds to streams with conductivity of about 300 μ S/cm on average. $\underline{\text{Id}}$. at A-36. A statistical analysis included in the benchmark determined that at a conductivity level of 300 μ S/cm a stream is 59% likely to be impaired, and at 500 μ S/cm a stream is 72% likely to be impaired. $\underline{\text{Id}}$.

This benchmark is supported by peer-reviewed studies. Cormier, et al., Derivation of a Benchmark for Freshwater Ionic Strength, Environmental Toxicology and Chemistry, 32(2): 263-271 (2013), and references cited therein; Bernhardt, et al., "How Many Mountains Can We Mine? Assessing the Regional Degradation of Central Appalachian Rivers by Surface Coal Mining," Environmental Science & Technology, 46 (15), pp. 8115–8122 (2012). The ionic mixture coming out of the underdrains at Red River's North Fox Gap Surface Mine listed above is consistent with that associated with coal mining pollution in this region (Pond et al. 2008; Palmer et al. 2010; Bernhardt and Palmer 2011; Lindberg et al. 2012; Pond et al. 2012; Pond et al. 2012; Pond et al. 2013). The ionic mixture of calcium, magnesium, sulfate, and biocarbonate in alkaline mine water discharged from coal mines causes the loss of aquatic macroinvertebrates in Appalachian areas where surface coal mining is prevalent; it is the mixture of ions that causes the biological impairment (Cormier et al. 2013b; Cormier and Suter 2013). This mixture also has significant adverse effects on fish assemblages (Hitt 2014; Hopkins 2013) and has toxic effects on aquatic life, including mayflies (Kunz 2013; Echols 2010; Kennedy 2004).

Bernhardt et al. (2012) concluded that:

The extent of surface mining within catchments is highly correlated with the ionic strength and sulfate concentrations of receiving streams. Generalized additive models were used to estimate the amount of watershed mining, stream ionic strength, or sulfate concentrations beyond which biological impairment (based on state biocriteria) is likely. We find this threshold is reached once surface coal mines occupy >5.4% of their contributing watershed area, ionic strength exceeds 308 μ S cm⁻¹, or sulfate concentrations exceed 50 mg L⁻¹.

The applicability of EPA's benchmark to first- and second-order headwater streams within Virginia's Central Appalachian coalfield region was confirmed by Timpano, et al., Levels of Dissolved Solids Associated with Aquatic Life Effects in Headwater Streams of Virginia's Central Appalachian Coalfield Region (2011), prepared for Virginia Department of Environmental Quality and Virginia Department of Mines, Minerals, and Energy. That study's authors concluded that:

Family-level biological effects, as defined by VASCI scores indicating stressed or severely stressed conditions, were observed with increasing probability from 0% at TDS \leq 190 mg/L to 100% at TDS \geq 1,108 mg/L.

The ongoing discharges of calcium, magnesium, sulfate and bicarbonate (measured as TDS and conductivity) from Red River's North Fox Gap Surface Mine's underdrains 1, 2, 3, 4, 5, 6, and 8 have likely caused or materially contributed to biological impairment in the South Fork Pound River, Rat Creek, and unnamed tributaries to those water bodies.

II. LEGAL CLAIMS

A. Clean Water Act Violations

Section 301 of the CWA, 33 U.S.C. § 1311, prohibits the discharge of any pollutant by any person, except in compliance with a permit. Red River's VPDES Permit VA0081401 authorizes the discharge of pollutants from certain identified locations at the North Fox Gap Surface Mine. At least since February 26, 2015, when DMLR authorized the deletion or relocation of NPDES monitoring points formerly located below underdrains 1 through 6, Permit VA0081401 has not authorized any discharge of any pollutant in any amount from underdrains 1, 2, 3, 4, 5, 6, or 8.

Each of the hollow fills and associated underdrains is a defined and discrete conveyance that discharges pollutants into jurisdictional waters, and therefore meets the definition of point source under the Clean Water Act.

Red River continues to discharge wastewater high in total dissolved solids, ionic chemicals and conductivity from underdrains 1, 2, 3, 4, 5, and 8 into unnamed tributaries of the South Fork Pound River, and ultimately into the South Fork Pound River, without CWA permit authorization. Red River also continues to discharge wastewater high in total dissolved solids, ionic chemicals and conductivity from underdrain 6 into an unnamed tributary of Rat Creek, and then into Rat Creek and into the South Fork Pound River, without permit authorization. These unpermitted discharges violate section 301 of the CWA.

As explained above, recent effluent characteristic sampling – including sampling conducted by Red River and its representatives – has revealed that Red River is discharging TDS and conductivity into the South Fork Pound River, Rat Creek, and unnamed tributaries to those waterbodies, at levels that are harmful to aquatic life. The Environmental Groups believe and assert that every discharge from the subject underdrains since outfalls 001, 002, 003, and 006 were deleted from Red River's NPDES permit or since the associated monitoring points were relocated to a location above the hollow fill constitutes an addition of pollutants in violation of Section 301 of the Act. In the absence of any serious efforts to prevent similar future violations, Red River continues to discharge TDS, ionic chemicals, conductivity, and other pollutants from those outfalls to the receiving streams without a permit in violation of Section 301.

That Red River retains VPDES Permit VA0081401, which authorizes the discharge of certain pollutants from certain outfalls at the North Fox Gap Surface Mine, does not allow Red River to evade liability for the ongoing discharges from underdrains 1, 2, 3, 4, 5, 6, and 8. Under Section 402(k) of the CWA, 33 U.S.C. § 1342(k), compliance with the effluent limits contained within a valid NPDES permit constitutes compliance with Section 301. See also 40 C.F.R. § 122.5. In order to invoke the protections of the permit shield provided by Section 402(k), however, the permit holder must comply with the express terms of its permit. Ohio Valley Envtl. Coal. v. Fola Coal Co., LLC, 845 F.3d 133, 142 (4th Cir. 2017). Red River's discharges of high levels of TDS, ionic chemicals and conductivity from underdrains 1, 2, 3, 4, 5, 6, and 8 violate "standard NPDES permit term and condition" F of Permit VA0081401 which states that "Except in compliance with this permit, or another permit issued by the Department, it shall be unlawful for any person to: 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or 2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses." Because Red River's discharges of TDS and conductivity from underdrains 1, 2, 3, 4, 5, 6, and 8 are not currently authorized by Permit VA0081401, and because those discharges contain "deleterious substances," and alter the physical, chemical, and biological properties of the state's waters and make them detrimental to aquatic life, no permit shield is available and Red River is in ongoing violation of Section 301. Permit condition F is similar to the standard permit condition in NPDES permits for coal mines in West Virginia, which requires discharges to

be of sufficient quality "so as not to cause violation of applicable water quality standards." The Fourth Circuit recently determined that violation of that West Virginia permit condition was sufficient to render the Section 402(k) permit shield unavailable to a defendant mining company. *Id.* at 143. Thus, Red River's ongoing discharges from underdrains 1, 2, 3, 4, 5, 6, and 8 are not protected by Section 402(k)'s permit shield.

B. SMCRA Violations

Section 520(a)(1) of SMCRA authorizes citizens to commence civil actions against any person alleged to be in violation of rules, orders, or permits issued pursuant to SMCRA. 30 U.S.C. § 1270(a)(1). Virginia maintains a federally-approved mining program under SMCRA which is administered by DMLR pursuant to the Virginia Coal Surface Mining Control and Reclamation Act ("VCSMCRA"), VA Code § 45.1-226 et seq. Violations of a federally-approved state program are enforceable in federal court under SMCRA's citizen suit provision. Molinary v. Powell Mountain Coal Co., Inc., 125 F.3d 231, 237 (4th Cir. 1997). We believe that Red River is in continuous and ongoing violation of the applicable performance standards under the VCSMCRA.

Red River's SMCRA-related violations began at least in November 2012, when Red River's contractor, Biologic Monitoring, Inc., measured a failing VASCI score of 43.2 indicating biological impairment at monitoring point SFP-2, immediately downstream of discharges from underdrains 1, 2, 3, 4, 5, 6, and 8.

Section 506 of SMCRA prohibits surface coal mining operations without a permit from the Office of Surface Mining Reclamation and Enforcement ("OSMRE") or from an approved state regulatory authority. 30 U.S.C. § 1256. Red River holds CSMO permit 1101401 from DMLR for its North Fox Gap Surface Mine. The VCSMCRA provides that "[a]ny permit issued pursuant to this chapter to conduct coal surface mining operations shall require that such operations meet all applicable performance standards established by the Director." VA Code § 45.1-242(B). In turn, the VCSMCRA regulations provide that "[t]he permittee shall comply with the terms and conditions of the permit, all applicable performance standards of the Act, and the requirements of this chapter." 4 VAC 25-130-773.17(c).

The federal performance standards under SMCRA mandate that all discharges from permitted mining operations "be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 C.F.R. Part 434." 30 C.F.R. §§ 816.42 & 817.42. The State program prescribes a similar standard: "Discharges of water from areas disturbed by surface mining activities shall be made in compliance with all applicable State and Federal water quality laws, standards and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR 434." 4 VAC 25-130-816.42.

As described above, Red River's discharges from the North Fox Gap Surface Mine into the South Fork Pound River, Rat Creek, and unnamed tributaries of those water bodies, from underdrains 1, 2, 3, 4, 5, 6, and 8 have caused violations of the narrative water quality standard for protection of aquatic life. Consequently, Red River is in violation of the state performance standards that prohibit mining operations from causing violations of water quality standards.

In addition, Red River's mining operations have resulted in impermissible material damage to the hydrologic balance beyond the permit boundary. The performance standards under VCSMCRA mandate that "[a]II surface mining and reclamation activities shall be conducted . . . to prevent material damage to the hydrologic balance outside the permit area." 4 VAC 25-130-816.41. At a minimum, material damage includes violations of water quality standards, and therefore the water quality standards violations described above constitute material damage to the hydrologic balance and are actionable in a SMCRA citizen suit against Red River.

Moreover, Red River has a legal duty to treat its effluent to ensure that it does not violate water quality standards. Federal and State performance standards require that, "[i]f drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial practices are not adequate to meet the requirements of this section and § 816.42, the operator shall use and maintain the necessary water-treatment facilities or water quality controls." 30 C.F.R. § 816.41(d)(1); see also 4 VA ADC 25-130-816.41(d)(1). The violations identified herein show unequivocally that Red River's existing treatment methods are insufficient to meet that requirement. Indeed, because Red River has removed ponds 1, 2, 3, 4, 5, 6, and 9, the company is not applying any treatment methods whatsoever to discharges from underdrains 1, 2, 3, 4, 5, 6, or 8. Thus, the performance standards require Red River to construct systems that will effectively treat its effluent to levels that comply with all applicable water quality standards.

Finally, Red River's violations of the performance standards that prohibit violations of water quality standards and material damage and that require adequate treatment to avoid such violations are violations of its CSMO permit 1101401. By operation of 4 VAC 25-130-773.17(c), that permit incorporates the performance standards discussed in this letter as terms of the permit itself. Consequently, Red River is violating its SMCRA permit.

III. Conclusion

As discussed above, if Red River fails to come into compliance with the Clean Water Act; the terms of VPDES Permit VA0081401; SMCRA; surface mining regulations; and the permit conditions of CSMO Pemit 1101401, we intend to file a citizen suit under section 505(a)(1) of the Clean Water Act seeking civil penalties and injunctive relief, as well as a citizen suit under section 520(a)(1) of SMCRA seeking a court order compelling Red River to come into compliance with the law. Be aware that this notice is sufficient to allow us to sue Red River for any post-notice violations related to the violations described herein. See generally, Public Interest Research Group of N.J., Inc. v. Hercules, Inc., 50 F.3d 1239 (3rd Cir. 1995).

If Red River has taken any steps to eradicate the underlying cause of the violations described above, or if Red River believes that anything in this letter is inaccurate, please let us know. If Red River does not advise us of any remedial steps during the 60-day period, we will assume that no such steps have been taken and that violations are likely to continue. Additionally, we would be happy to meet with Red River or its representatives to attempt to resolve these issues within the 60-day notice period.

Sincerely,

/s/ Joseph M. Lovett
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Appendix A:

Sampling results for TDS and conductivity for underdrains 1, 2, 3, 4, 5, 6, and 8

Date	UD-1:	UD-1:	UD-1:
	TDS	Cond.	Flow
1/12/12	2038	2189	3
1/27/12		1667	15
2/2/12		1882	15
2/21/12		1677	10
3/1/12		1075	100
3/9/12		1043	50
4/2/12	2524	2573	25
4/19/12		2041	5
5/4/12		2012	5
5/15/12		1898	10
6/1/12		2222	25
7/2/12	3356	3099	2
7/9/12		2433	1
8/1/12		1095	45
8/10/12		1793	3
10/8/12	2144	2275	10
11/1/12		1405	15
12/11/12		2200	5
12/21/12		2221	10
1/14/13	1520	1793	20
1/31/13		701	25
2/14/13		1664	5
2/22/13		1934	10
3/12/13		1448	10
3/25/13		933	10
4/5/13	1398	1729	100
4/12/13		1719	10
5/8/13		2030	60
5/20/13		1568	35

	_		1
6/7/13		2591	25
6/21/13		1590	75
7/11/13	1586	1906	5
7/29/13		2159	3
8/12/13		2188	3
10/22/13	2402	2733	1
11/1/13		2382	3
11/18/13		2454	1
12/10/13		947	6
12/17/13		1404	5
1/13/14	1018	1343	40
1/24/14		2141	15
2/17/14		1796	15
2/25/14		1542	20
3/16/14		1852	30
3/26/14		2367	25
4/16/14	1844	2040	5
4/24/14		2025	4
5/8/14		2044	3
5/29/14		2590	3
6/12/14		2615	5
6/21/14		2568	10
7/10/14	3092	3054	3
7/22/14		2986	5
8/19/14		3034	7
8/28/14		3115	8
9/10/14		3110	5
9/24/14		2536	2
10/14/14	1892	2098	5
10/22/14		2171	3
11/11/14		1980	2
			1

11/20/14		2043	5
12/11/14		2047	1
12/24/14		2026	1
1/12/15	1458	1627	1
1/22/15		1983	1
2/11/15		1656	5
3/16/15		1515	40
3/26/15		2305	5
4/9/15	1474	1760	5
4/21/15		1558	5
5/11/15		2391	5
7/10/15	1992	2207	2
7/21/15		1601	5
8/13/15		2701	2
8/27/15		2907	2
9/4/15		2950	1
9/25/15		1653	5
10/15/15	2298	2559	5
10/28/15		2665	3
11/9/15		2594	5
11/25/15		2843	5
12/7/15	4	1812	5
12/16/15		2302	3
3/5/16	1558	1740	5
6/21/16	2498	2553	3
9/28/15	2740	2828	1
11/30/16	1162	1476	5
2/22/17	1600	1912	5

	UD-2:	UD-2:	UD-2:	5/9/13		3186	40	10/24/14		3170	70
	TDS	Cond.	Flow	5//13		2157	50	11/5/14		2982	70
1/17/12	2990	3029	20	6/5/13		3440	40	11/13/14		3054	65
1/27/12		2487	5	6/21/13		1967	100	12/3/14		2978	10
2/9/12		2795	15	7/2/13	2974	3027	50	12/23/14		3069	18
2/28/12		2806	50	7/17/13		3255	50	1/10/15	2770	2895	20
3/9/12		1673	75	8/7/13		3771	35	1/20/15	2770	3019	40
3/19/12		2803	30	8/16/13		3078	10	2/10/15		2818	65
4/3/12	3282	3271	10	9/10/13		3028	25	3/16/15		2424	75
4/25/12		3405	45	9/27/13		3357	15	3/26/15		3065	54
5/4/12		3476	15	10/8/13	3400	3388	20	4/9/15	2748	2773	15
5/15/12		2509	25	10/16/13		3593	10	4/21/15	2710	2667	27
6/15/12		3716	10	11/8/13		3373	30	5/11/15		3481	27
6/28/12		3670	20	11/21/13		3344	30	5/18/15		3518	15
7/2/12	4148	3676	15	12/5/13		3131	10	6/11/15		3826	27
7/30/12		3237	5	12/17/13		2670	25	6/18/15	<u> </u>	3775	5
8/6/12		1778	100	1/10/14	2614	2862	34	7/10/15		3232	15
8/30/12		2747	10	1/24/14		3082	25	7/21/15		3205	36
9/4/12	W.	3261	15	2/10/14		2720	34	8/13/15		3921	18
9/14/12		3627	30	2/19/14		1746	34	8/27/15		4021	25
10/11/12	1990	2217	35	3/6/14		2369	34	9/4/15		4068	18
10/23/12		3661	10	3/13/14		2809	50	9/25/15		4022	10
11/8/12		3182	75	4/3/14	2950	2933	80	10/12/15		3744	25
11/26/12		3184	25	4/29/14		2690	88	10/22/15		3952	18
12/7/12		3316	20	5/7/14		3414	37	11/9/15		3784	5
12/14/12		3011	25	5/29/14		3424	20	11/23/15		3763	27
12/27/12		1651	150	6/2/14		3463	10	12/7/15		3111	27
1/11/13	2716	2737	50	6//14		3612	36	12/16/15		3586	10
1/28/13		2644	100	7/7/14	3922	3645	11	3/5/16		2955	35
2/7/13		2217	35	7/21/14		2031	40	6/21/16		3692	18
2/21/13		2629	35	8/12/14		1687	48	9/27/16		3868	25
3/13/13		2411	25	8/19/14		3204	73	11/22/16		3822	18
3/26/13		2288	100	9/3/14		3005	65	2/22/17		3174	25
4/5/13	2576	2675	75	9/29/14	J	3400	70				
4/19/13		1640	300	10/10/14	2932	2960	90				

Date	UD-3:	UD-3:	
Date	TDS	Cond.	Flow
1/17/12	1804	2136	150
1/27/12		2049	30
2/9/12		2048	50
2/28/12		2069	250
3/9/12		1875	400
3/19/12		1987	350
4/3/12	1906	2055	200
4/25/12		2237	200
5/4/12	i i	2202	300
5/15/12		2115	300
6/15/12		2238	300
6/28/12		2220	200
7/2/12	1990	2214	300
7/30/12		2205	300
8/6/12		1910	350
8/30/12		2275	300
9/4/12		2314	400
9/14/12		2179	150
10/11/12	3372	3254	250
10/23/12		2240	250
11/8/12		2116	350
11/26/12		2243	200
12/7/12		2221	300
12/14/12		2183	350
12/27/12		1662	250
1/11/13	1910	2202	350
1/28/13		2127	250
2/7/13		2122	300
2/21/13		2071	250
3/13/13		2092	250
3/26/13		2059	300
4/5/13	1866	2080	300
4/19/13		2074	400

E /0 / 10			
5/9/13		2185	300
5/20/13		1908	30
6/5/13		2327	225
6/21/13	Š	2180	120
7/2/13	2028	2280	350
7/17/13		2324	250
8/7/13		2340	250
8/16/13		2276	250
9/10/13		2291	200
9/27/13		2304	250
10/8/13	2080	2355	200
10/16/13		2338	150
11/8/13		2338	100
11/21/13		2211	100
12/5/13		2210	150
12/17/13		2120	350
1/10/14	1786	2091	520
1/24/14		2080	456
2/10/14		2025	520
2/19/14		1838	520
3/6/14		1941	520
3/13/14		2006	350
4/3/14	1948	2068	400
4/29/14		2103	378
5/7/14		2173	243
5/29/14		2200	250
6/2/14		2195	200
6/20/14		2233	216
7/7/14	2044	2231	100
7/21/14		2037	150
8/12/14		1685	250
8/19/14		2214	328
9/3/14		2238	266
9/29/14		2260	270
10/10/14	1906	2184	300

10/24/14		2233	280
11/5/14		2261	280
11/13/14		2223	250
12/3/14		2196	250
12/23/14		2195	270
1/10/15	1902	2196	300
1/20/15		2210	350
2/10/15		2151	410
3/16/15		2219	400
3/26/15		2192	288
4/9/15	1858	2121	350
4/21/15		2088	288
5/11/15		2141	365
5/18/15		2231	250
6/11/15		2378	162
6/18/15		2335	150
7/10/15	1930	2212	250
7/21/15		2065	315
8/13/15		2325	180
8/27/15		2298	250
9/4/15		2300	180
9/25/15		2300	150
10/12/15	1792	2184	250
10/22/15		2297	180
11/9/15		2200	150
11/23/15		2247	270
12/7/15		2111	270
12/16/15		2202	250
3/5/16	1676	1919	350
6/21/16	1958	2109	216
9/27/16	2020	2224	250
11/30/16	1568	1922	200
2/22/17	1880	2156	300

Date	UD-4:	UD-4:	UD-4:
0.000.000.00	TDS	Cond.	Flow
1/19/12	2100	2267	5
1/27/12		1759	5
2/10/12		1913	2
2/28/12		1905	10
3/21/12		2078	2
3/30/12		2221	2
4/20/12	2212	2445	2
4/27/12		1578	5
5/8/12		2342	3
5/25/12		2339	2
6/15/12		2301	1
6/27/12		2522	1
7/16/12	1362	1458	2
7/30/12		2535	2
8/13/12		2526	2
8/30/12		2481	2
9/14/12		2446	2
10/18/12	2266	2377	1
10/29/12		2418	2
11/13/12		2123	2
11/26/12		2117	2
12/17/12	-	2402	1
12/28/12		2384	13
1/14/13	1660	1918	5
1/28/13		1928	5
2/7/13		1909	5
2/19/13		1889	5
3/4/13		1692	5

3/28/13		1624	25
4/5/13	1682	1818	30
4/19/13		833	100
5/9/13		1977	920
5/21/13		1981	15
6/7/13		2243	15
6/18/13		441	120
7/11/13	2016	2284	5
7/23/13		2310	5
8/8/13		2295	5
8/22/13		2284	5
9/23/13		2302	5
1/10/14	1384	1711	5
1/24/14		1937	5
2/10/14		1607	5
2/19/14		2085	5
3/4/14		1556	15
3/13/14		1681	20
4/3/14	1540	1757	13
4/29/14		1923	18
5/7/14		2070	10
5/21/14		2186	5
6/2/14		2263	3
6/20/14		2337	2
7/7/14	2330	2394	2
7/21/14		2326	5
8/12/14		2200	10
8/19/14		1992	11
9/3/14		2025	10
9/29/14		2832	20

10/10/14	1154	1363	25
10/24/14		1950	10
11/5/14		1763	10
11/13/14		1859	5
12/3/14		1981	5
12/24/14		1910	1
1/10/15	1398	1689	2
1/20/15		1964	10
2/10/15		1708	18
3/16/15		1719	40
3/26/15		2123	27
4/9/15	1462	1712	5
4/21/15		1635	27
5/11/15		2200	5
7/10/15	1304	1531	10
7/21/15		1690	18
8/13/15		2242	3
8/27/15		2374	1
10/12/15	1730	2084	3
10/22/15		2261	3
11/9/15		2014	3
11/23/15		2082	1
12/7/15		1776	5
12/16/15		2107	2
3/5/16	1594	1810	5
5/27/16	1852	1888	3
9/27/16	2042	2240	1
11/30/16	952	1222	10
1/30/17	1502	1450	5

Date	UD-5:	UD-5:	UD-5:
	TDS	Cond.	Flow
1/19/12	2588	2710	10
1/27/12		2428	15
2/10/12		2560	50
2/28/12		2571	30
3/21/12		2621	45
3/30/12		2631	100
4/20/12	2726	2873	60
4/27/12		2229	50
5/8/12		2906	50
5/25/12		2907	20
6/15/12		2873	10
6/27/12		3102	25
7/16/12	2906	2801	20
7/30/12		3130	30
8/13/12		3091	45
8/30/12		2985	35
9/14/12		2956	30
9/28/12		2470	35
10/18/12	3142	3048	30
10/29/12		3085	25
11/13/12		2758	50
11/26/12		2745	50
12/17/12		3081	30
12/28/12		3238	162
1/14/13	2502	2620	125
1/28/13		2909	40
2/7/13		2588	50
2/19/13		2554	50
3/4/13		2269	65
3/28/13		2435	75
4/5/13	2512	2548	150
4/19/13		1927	150
5/9/13		2645	35

5/21/13 6/7/13		2733	30
		2883	40
6/18/13		1544	150
7/11/13	1986	2236	50
7/23/13		2300	50
8/8/13		2380	50
8/22/13		2334	50
9/10/13		2469	30
9/23/13		2400	30
10/10/13	2604	2835	30
10/25/13		2914	35
11/18/13		2733	35
11/25/13		2721	35
12/5/13		2721	35
12/13/13		1945	35
1/10/14	2464	2720	68
1/24/14		2708	68
2/10/14		2433	68
2/19/14		2073	68
3/4/14		2417	83
3/13/14		2515	70
4/3/14	2330	2465	60
4/29/14		2646	79
5/7/14		2670	47
5/21/14		2717	45
6/2/14		2868	25
6/20/14		3033	20
7/7/14	3102	3085	43
7/21/14		2307	45
8/12/14		2214	50
8/19/14		2902	65
9/3/14		2883	50
9/29/14		3011	60
10/10/14	2722	2820	65
10/24/14		2832	50

11/5/14		2789	50
11/13/14		2730	45
12/3/14		2739	35
12/24/14		2719	36
1/10/15	2506	2612	40
1/20/15		2734	80
2/10/15		2591	120
3/16/15		2560	100
3/26/15		2804	72
4/9/15	2362	2510	50
4/21/15		2435	54
5/11/15		2794	54
5/18/15		2604	50
6/11/15		3056	36
6/18/15		3127	40
7/10/15	2510	2682	50
7/21/15		2651	41
8/13/15		3028	36
8/27/15		3059	50
9/4/15	Į.	3105	27
9/25/15	ţ	3042	20
10/12/15	2432	2720	45
10/22/15		2875	36
11/9/15		2825	35
11/23/15		2915	54
12/7/15		2451	36
12/16/15		2715	35
3/5/16	2226	2391	45
5/27/16	2506	2575	54
9/27/16	3198	3194	36
11/22/16	3256	3304	36
1/30/17	2374	2116	50

Date	UD-6:	UD-6:	UD-6:
	TDS	Cond.	Flow
1/12/12	2074	2197	25
1/27/12		1986	25
2/2/12		2135	20
2/21/12		2051	50
3/1/12		1708	50
3/30/12		2219	50
4/19/12	2034	2334	50
4/27/12		1553	50
5/4/12		2236	20
5/29/12		1841	30
6/18/12		2486	30
6/27/12		2626	25
7/9/12	2422	2481	50
7/30/12		2198	30
8/1/12		1638	200
8/13/12		2236	150
9/11/12		2570	50
9/20/12		2557	50
10/2/12	2290	2354	75
10/29/12		2661	35
11/1/12		2328	200
11/30/12		2699	75
12/10/12		2120	300
12/21/12		2598	100
1/14/13	2302	2462	150
1/28/13		2238	75
2/14/13		2170	75
2/22/13		2211	75
3/12/13		2140	75
3/25/13		2134	175
4/5/13	2244	2277	200
4/18/13		2131	400

	5/8/13		2315	140	_
	5/20/13		2308	100	-
	6/7/13		2504	60	-
	6/18/13		820	400	
	7/11/13	2184	2342	75	
	7/31/13		2452	25	
	8/14/13		2225	50	_
	8/28/13		2402	50	
	9/19/13		2405	50	
	9/26/13		2279	35	
	10/16/13	2214	2429	35	
	10/24/13		2424	15	
	11/1/13		2211	25	
	11/18/13		2250	35	_
	12/9/13		1730	75	
	12/19/13		2069	50	_
	1/6/14	1698	2033	75	
	1/24/14		2131	50	_
	2/3/14		1309	75	
	2/19/14		1840	100	
	3/6/14		2031	95	
	3/19/14		1189	75	
	4/1/14	1840	1984	80	
	4/16/14		2166	200	
	5/2/14		2090	120	
L	5/12/14		2320	125	
	6/11/14		2289	75	
	6/26/14		2445	25	
	7/7/14	2382	2460	50	
	7/14/14		2430	60	
	8/12/14		1840	65	
0.00	8/28/14		2293	75	
	9/3/14		2296	80	
	9/29/14		2435	80	

10/10/14	2060	2250	90
10/24/14		2406	60
11/5/14		2420	60
11/13/14		2421	55
12/3/14		2380	35
12/23/14		2405	50
1/10/15	2236	2392	55
1/20/15		2393	70
2/10/15		2321	100
3/16/15		2203	150
3/26/15		2307	100
4/9/15	2090	2231	250
4/24/15		2140	150
5/11/15		2269	50
5/18/15		2323	50
6/10/15		2423	50
6/17/15		2447	50
7/9/15	2004	2125	75
7/17/15		1940	100
8/11/15		2183	50
8/24/15		2461	50
9/11/15		2520	40
9/25/15		2576	50
10/12/15	2088	2355	100
10/28/15		2352	50
11/5/15		2451	25
11/23/15		2521	50
3/5/16	1870	2020	100
6/10/16	2194	2390	75
9/28/16	2488	2588	30
11/30/16	1536	1805	100
2/27/17	2120	2301	75

Date	UD-8:	UD-8:	UD-8:
	TDS	Cond.	Flow
1/13/12	2880	2955	5
1/27/12		2641	25
2/10/12		2936	10
2/29/12		2825	50
3/19/12		2906	30
3/30/12		3056	30
4/16/12	3236	3232	10
4/25/12		3085	15
5/8/12		3256	10
5/29/12		3266	5
6/18/12		3280	10
6/27/12		3142	2
7/17/12	3320	3142	25
7/30/12		3032	20
8/13/12		3163	10
8/31/12		3308	30
9/19/12	1	3252	25
9/28/12		3235	25
10/8/12	1754	1941	30
10/24/12		3314	5
11/10/12		3314	30
11/29/12	20	3328	10
12/17/12		3342	30
12/28/12		3307	55
1/8/13	3118	3101	25
1/31/13		2200	50
2/6/13		2199	50
2/19/13		2200	50
3/13/13		2244	50
3/22/13		2193	50
4/15/13	3246	3205	30
4/24/13		2840	20
5/13/13		3285	25

5/21/13		2000	125
		3088	25
6/10/13		2751	100
6/27/13		2477	30
7/18/13	2534	2677	20
7/30/13		3274	20
8/12/13		2690	20
8/28/13		2501	20
9/17/13		3234	10
9/26/13		3231	5
10/3/13	2974	3240	10
10/17/13		3198	5
11/8/13		3111	5
11/20/13		3077	5
12/5/13		3213	5
12/20/13		2756	20
1/14/14	2410	2621	35
1/24/14		4492	25
2/17/14		2721	35
2/25/14		2736	40
3/16/14		2581	40
3/26/14		2589	35
4/9/14	2962	2917	30
4/24/14		3017	25
5/8/14	Y	3067	30
5/29/14		3110	20
6/12/14		3047	7
6/21/14		3000	25
7/10/14	3290	3100	5
7/22/14		3033	7
8/19/14		3099	8
8/28/14		3153	10
9/10/14		3149	8
9/24/14		2927	5
10/14/14	2112	2255	10
10/22/14		2750	10

11/11/14		2645	10
11/20/14		2724	10
12/11/14		2585	15
12/24/14		2668	10
1/12/15	2754	2796	10
1/22/15		2891	10
2/11/15		2867	10
3/9/15		2924	25
3/16/15		2998	50
4/13/15	3044	3062	15
4/21/15		2927	10
5/11/15		3331	20
5/20/15		3306	30
6/11/15		3408	5
6/18/15		3370	5
7/10/15	2822	2931	10
7/21/15		2467	20
8/13/15		3132	5
8/27/15		3211	3
9/4/15		3225	3
9/25/15		2907	5
10/12/15	2566	2730	5
10/22/15		2978	5
11/9/15		2882	3
11/24/15		3084	5
12/7/15		2565	5
12/16/15		2742	5
3/5/16	2698	2771	15
6/10/16	3184	3140	5
9/28/16	3422	3260	2
11/30/16	1620	1903	10
2/27/17	2120	2301	10